



CHAPTER 2

Defining and Measuring Informal Development and Assessing Its Causes



Informal settlements, new public housing developments, and established neighborhoods spread across the periphery of Panama City.

An important debate has continued for nearly 50 years concerning the magnitude and persistence of informal access to urban land and housing in Latin American countries. Policy makers, legislators, and academics regularly discuss the causes and implications of informal development, and consider the nature and context of the public policies necessary to confront it, both to regularize existing informal settlements and to prevent the phenomenon from expanding. Progress is often difficult, however, because of a lack of agreement about what constitutes informality, and analysis has been hindered by long-standing, intertwined problems of definition and measurement.

PROBLEMS OF DEFINITION

Several sets of characteristics are relevant in trying to define informality.

Development Features

Informal development encompasses many dimensions and variations in Latin American cities, including:

- occupation of public, communal, and private land, followed by self-construction (*favelas, barriadas, villas-miseria, villas-emergencia, chabolas, tugurios*), sometimes in originally approved subdivisions;
- the unlicensed subdivision of private, communal, and public land followed by the sale of individual plots and self-construction (*barrios, loteos piratas, loteamientos irregulares, loteamientos clandestinos*);



- irregular public housing projects (*conjuntos habitacionais*), some of which have gradually become extralegal;
- the urbanization and development of areas defined as rural;
- the unauthorized subdivision of previously existing legal plots for the construction of additional buildings (*casas-de-frente-e-fundo*);
- the widespread occupation of riverbanks, water reservoirs, mountain sides, and other environmentally protected areas; and
- the occupation of public spaces such as streets, pavements, and viaducts.

While differing in specific characteristics, settlements with one or more of these features are often categorized as informal. Such a general term has the advantage of being broad in scope, but its generality can impede effective public policies. For example, Calderon (1998) distinguished between illegal, irregular, and clandestine settlements to discuss the different situations of informal land development in Peru.

Physical Characteristics

The various criteria used to identify existing developments as informal settlements often reflect the distinct professional backgrounds and academic or institutional outlooks of the involved policy makers and analysts. Such physical criteria may include precarious urban infrastructure, public services, and collective equipment; inadequate construction; environmental degradation; absence of public spaces and of leisure, community, and cultural facilities; and predominance of poor residents. In some of the surveys mentioned below, possessing one or two of these criteria has been enough to classify a settlement as informal.

However, the presence of one or more of these features does not necessarily distinguish these settlements from other so-called formal settlements. For example, some long-

consolidated Brazilian *favelas* are better equipped with urban infrastructure, services, or solid building construction than newer formal land subdivisions on the urban periphery. Indeed, incremental consolidation over time has been the general rule of informal development in Latin America.

The Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística; IBGE 2000) defines a “subnormal” census block as one that satisfies the following conditions: (1) forms a group of more than 50 housing units; (2) occupies the land illegally; and (3) exhibits a disorderly pattern of urbanization and/or lack essential public services.

Socioeconomic Characteristics

The socioeconomic profile of the individuals living in informal settlements cannot be the main criterion to define informality. Most people living in informal settlements are indeed poor, and most socioeconomic indicators—literacy, education, health, mortality, income, and employment—demonstrate their low incomes and poor-quality living and housing conditions. However, residents in many informal settlements represent a wide range of socioeconomic categories, especially in high-value established urban locations where many residents are considered more middle-class.

Moreover, many poor people live in formal settlements. According to the Pereira Passos Institute (2002), 64 percent of the poor in Rio de Janeiro (here defined as families living on the equivalent of less than one Brazilian minimum wage) resided outside *favelas* in peripheral (both irregular and regular) *loteamentos* (IBGE 2000).

Neither is informal employment a hallmark of informal settlements. Rocinha, Rio de Janeiro’s largest *favela*, has a dynamic and diversified informal economy involving several social and capital networks, as well as the



Informal housing expands upward in this neighborhood of La Plata, Argentina.

increasing presence of formal providers of consumption goods and services.

Legal Aspects

If there is an underlying and characteristic determinant in virtually all types of informal settlements, it is the violation of the prevailing legal order in one way or another. Informal settlements often have similar physical characteristics, but their different, specific legal problems have varying implications. Informal development usually involves the existence of one or more intrinsic forms of illegality, through violations of private, public, or communal land ownership rights; urban, environmental, or building regulations and standards; registration requirements; and taxation provisions.

The key issues in addressing informal land development in Latin America are the determinants of legal security of land tenure and effective access to serviced urban land and housing. Unlike the matter of urban upgrading, the lack of full legal security of land tenure depends largely on the action of the public authorities, as there is a limited scope for what the individuals and communities can do by and for themselves.

CHALLENGES OF MEASUREMENT

The large scale of informal urban land development is confirmed by various indicators from many sources. In Latin America, informal development has been one emblematic characteristic of rapid urban growth as millions of people have gained access to urban land and housing primarily through informal mechanisms. However, precisely quantifying informality remains a challenge. Information and data at all levels, from global to local, tend to be fragmented, imprecise, and often questionable.

UN-HABITAT, the World Bank, Cities Alliance, and other international bodies have attempted to provide reliable statistics. In a widely referenced report, UN-HABITAT (2003) suggested that more than one billion people were living in slums or informal settlements globally, and that this number would grow to 1.4 billion by 2020. UN-HABITAT more recently defined informal development or slums as encompassing at least one of five specific criteria (box 1).

Based on an assessment of the situation in 15 Latin American countries, MacDonald (2004) estimated that at least 25 percent of the urban population lives in informal settlements, increasing from 111 million to 127 million between 1990 and 2001. The World Bank (2007, 1) reported that informal tenure “is common, accounting for about one third of home ownership.”

The statistics vary in different countries, but the realities are similar. For example, 20 to 25 percent of the dwellings in the main cities of Brazil are estimated to stem from illegal land occupation. In Argentina, the population living in *villas-emergencia* in Buenos Aires has grown 25 percent over the past few years, housing some 200,000 people, a figure equivalent to almost 7 percent of the city’s inhabitants (Clichevsky 2006).

Different estimates of the size and growth

of informal developments reflect the difficult task of defining informality. For example, in Buenos Aires the percentage of households without secure tenure jumps from 1.37 percent, if the measure is defined as households not owning the land they occupy, to 10.19 percent, if it is defined as the lack of title or legal documents proving tenure security (Smolka and Biderman 2009, 14). Data in the Brazilian census indicate that the population living in “substandard” urban settlements declined from 7.0 million in 1990 to 6.5 million in 2000. Improved cartographic analysis may be able to identify more precise information on informal settlements.

Although most censuses and surveys have been more precise in determining the levels of public service provision, they have not been able to measure the number of dwellings with illegal land tenure. A recurrent survey problem is self-perception. When asked if they own their house, residents often respond positively, because this is how they perceive their status. The lack of efficient land cadastres and centralized land registries in many countries also limits the option of collecting alternative data on illegality.

While recognizing that the basic illegal nature of informal development may make its definition more precise, the many potential and overlapping layers of illegality also make quantification of the problem a serious challenge. The essential legal dimensions involve both land tenure aspects (occupation of private, public, and/or communal land, and informal subdivision of land) and urban planning aspects (mainly the unlicensed subdivision of one’s own land). Other legal aspects such as lack of registration, violation of building rules, and taxation matters are certainly important and need to be acknowledged, but they are not essential determinants of informal development.

The process of informal access to urban land and housing in Latin America

BOX 1

UN-HABITAT’s Definition and Measurement of Slums

UN-HABITAT has developed a household level definition in order to use existing household level surveys and censuses to identify slum dwellers among the urban population. A slum household lacks any one of the following five elements:

- Access to improved water (*access to sufficient amount of water for family use, at an affordable price, available to household members without being subject to extreme effort*);
- Access to improved sanitation (*access to an excreta disposal system, either in the form of a private toilet or a public toilet shared with a reasonable number of people*);
- Security of tenure (*evidence of documentation to prove secure tenure status or de facto or perceived protection from evictions*);
- Durability of housing (*permanent and adequate structure in non-hazardous location*); and
- Sufficient living area (*not more than two people sharing the same room*).

Using this definition, UN-HABITAT estimates indicate that in 2001, 924 million people, or 31.6 percent of the world’s urban population, lived in slums. In developing regions, slum dwellers account for 43 percent of the urban population, compared to 6 percent of the urban population in Europe and other developed regions.

In 2001, Asia had 554 million slum dwellers, or 60 percent of the world’s total; Africa had 187 million (20 percent of the total); and Latin America and the Caribbean had 128 million (14 percent of the total). It is projected that in the next 30 years, the number of slum dwellers worldwide will increase to 2 billion if no firm or concrete action is taken to arrest the situation.

Source: UN-HABITAT (2006).

is by no means new. Informal settlements in cities such as Rio de Janeiro and Bogotá span many decades and have increased significantly over the last 30 years. Most informal land development used to take place in capital and large cities, but it is also observed in middle-sized and even small cities (table 1).

TABLE 1
Number of *Favelas* in Brazilian Municipalities by Population Size, 2000

Municipal Population Size Category	Total Number of Municipalities	Occupancy of <i>Favelas</i>	
		Total Number of <i>Favelas</i>	Total Households in <i>Favelas</i>
Up to 5,000	1,371	61	1,995
5,001–20,000	2,688	436	39,104
20,001–100,000	1,275	1,693	132,834
100,001–500,000	194	3,373	532,047
More than 500,000	32	6,191	1,654,736
TOTAL	5,560	11,754	2,360,716

Source: IBGE (2000).

CAUSES OF INFORMAL DEVELOPMENT

Low Income

Poverty and underlying global and national macroeconomic factors, especially wealth distribution and job creation, play a central role in determining the process of informal development. Although most inhabitants of informal settlements are indeed poor, poverty is not the sole cause of informal land development. Some data indicate that the levels of absolute poverty have decreased while informality has grown (IPEA n.d.).

In Rio de Janeiro, for example, the rates of informal growth have been higher than the growth rates of both urban population and poverty. In 1961, when the city had a population of about 3 million, an estimated 300,000 people (10 percent of the population) lived in *favelas*. By 2009, the city had a population of 6 million, and reportedly about 1.25 million dwellers (more than 20 percent of residents) lived in *favelas* and other informal settlements. In São Paulo, informal dwellings were 6.9 percent of the total in 1991, but their share increased to 11.4 percent by 2001 (Dowall 2007).

Sociospatial Issues

The process of informal access to urban land and housing results in part from factors

related to the configuration of the spatial order. The current situation reflects what has been called the structural inability of public administrations in Latin American countries, especially at the local level, to guarantee sufficient access to accessible and affordable serviced land and/or housing units in urban areas (Smolka and Lorangeira 2008). Infrastructure investment has typically been underfunded or spatially biased to high-income areas. Public authorities have rarely made a consistent effort to recapture for the community any surplus value generated by public infrastructure service provision and changes in land use and development regulations.

Shortage of Social Housing

Informal development is also affected by the nature and scope of government housing policies. Insufficient social housing production is aggravated by the inadequate conditions of existing housing projects (many of which are illegal in some way, often because of lack of registration or municipal licenses, or violations of zoning and building standards). Moreover, the credentials required by many lending agencies to approve mortgage applicants have excluded most poor people from access to loans and even to many public housing programs.

In Brazil, for example, even following the recent launch of a significant national housing program, little formal housing is available for low-income families (those living on less than three Brazilian minimum wages). Only recently have the housing programs of Caixa Econômica Federal (the largest public bank in Latin America) started to reach out to lower-middle income groups (families living on less than five Brazilian minimum wages).

Chile is one of the few countries in the region that has implemented a large-scale social housing policy, but it has been criticized for concentrating the production of social



Public housing provides an alternative for low-income residents in Santiago, Chile.

housing in distant peripheral areas, thereby reinforcing sociospatial segregation (diPasquale and Cummings 2002).

Formal Market Outcomes

Combined with the unequal spatial distribution of urban infrastructure by the public authorities, the overall process of land and housing delivery through the formal market is characterized by prices that are high relative to incomes, and these high prices carry over to informal developments. Private developers traditionally have not catered to the needs of the urban poor in Latin American cities, especially in the absence of significant public subsidies, thus making room for informal land development opportunities. Even in many informal developments, prices for land, property, and rents are high, and services such as water supply are expensive. Informal development processes often involve highly profitable informal market operations (Abramo 2009; Smolka and Larangeira 2008).

Political Clientelism

The long-standing political manipulation of informal communities through clientelistic

practices also encourages more informal development. Questionable titles to public land have often been promised by politicians, who also have influenced which public areas are to be occupied. In some situations, false land titles have been given to the residents or official agents have benefited from new developments, both financially and politically. The actions of public authorities thus can affect the growth of informality as well as the action of land markets.

Unrealistic Planning

The urban planning tradition in major Latin American cities has reinforced informal processes, together with the lack of systematic public investment and service provision in the areas where most of the urban poor live. The resulting lack of serviced land then has the effect of creating more informality.

A recurrent criticism of urban planning highlights its poor integration of land, housing, environment, transportation, taxation, and budgetary policies. With few exceptions, local administrations have failed to promote a more inclusive urban order. Both existing planning laws and the approval (especially by local administrations) of elitist urban

New housing in this eroded area of Tegucigalpa, Honduras, is indicative of uncontrolled development and lack of planning.



planning regulations based on unrealistic technical standards often fail to take into account the socioeconomic realities determining the conditions of access to land and housing.

Regulations such as large minimum plot sizes, excessive development and construction restrictions, and prohibition of services, commerce, and small businesses in residential areas have had a fundamental role in generating high land and property prices. Only recently has research started to quantify how urban and environmental regulations have been translated into land prices and impacted the dynamics of urban land markets.

Problems of Urban Management

Informal settlements also stem from the exclusionary nature of the regulatory framework governing land development, as well as the bureaucratic nature of land and urban management systems that are arbitrary and fail to involve effective popular participation. In many Latin American cities, the licensing of subdivisions can take up to five years

(Larangeira 2002; Goytia, de Mendoza, and Pasquini 2010).

The imposition of strict obligations, the requirement of inflexible guarantees, and the lack of one-stop-shops to help potential developers or residents all contribute to high transaction costs. However, it remains difficult to quantify the extent to which bureaucratic costs are imbedded in land and property prices (Biderman, Smolka, and Sant'Anna 2008).

The cost and time needed to register land also discourages many people from obtaining legal security of tenure through that process. In Peru, for example, transactions in titled settlements are recorded for only one-fourth of sales, indicating that many others simply ignore the process (Calderon 2010). However, registration is the sole factor that constitutes legal ownership in many Latin American national legal systems.

A Dysfunctional Legal System

This complicated picture of informality is reinforced by the obsolete and contradictory workings of the overall legal and judicial

system in most Latin American countries. Tolerance for violating laws and the widespread lack of enforcement of existing laws are due in part to the public's lack of legal information and limited access to extrajudicial conflict resolution, and to the judicial system itself.

In short, the combination of unrealistic technical criteria, financial obligations, inflexible guarantees, lengthy licensing procedures, formalistic contractual rules, obsolete registration practices, and inefficient conflict resolution mechanisms has produced a highly prohibitive legal context contributing to informal development. The poor lack the legal, financial, and other resources necessary to defend themselves and their land rights, and more than other social groups they have felt the impact of the exclusionary legal order.

The prevailing urban-legal order in most Latin American cities has contributed to the formation of comparatively high land and property prices in both the formal and informal markets, abetting a pattern of socio-spatial segregation. These problems are more common than often realized, and violations involve socioeconomic groups other than the urban poor. For example, the widespread establishment of exclusive gated communities that prevent free access to public street systems and coastlines lacks a proper legal basis in many countries.

The occupation of public or environmentally protected land by more privileged groups is also common, and the systematic disrespect of building standards is widespread. The municipality of Belo Horizonte (Brazil) has acknowledged that 70 percent of its construction was irregular, including *favelas*. In Brasilia, land subdivisions, gated communities, and unauthorized construction are common (Distrito Federal 2006).

SUMMARY

Informal development encompasses a wide range of activities from unauthorized private and market-based land subdivision to wholesale occupation of public land. While this breadth of characteristics makes it difficult to measure the extent of informality precisely, all estimates indicate that it constitutes a large share of existing residences in Latin American cities. One key attribute of informality is illegality, often including the lack of a formal title to the occupied land parcel. Unfortunately, public records do not readily support estimates of the number of illegal parcels now or in the past.

The causes of informal development are many and varied, involving a range of socioeconomic, spatial, and institutional factors such as exclusionary planning, bureaucratic inefficiency, and the legal system itself. There is also a dynamic aspect to informality. Over time its patterns and the importance of its various causes continue to change. In this respect, our understanding of both the causes of informality and how to regularize existing settlements is still evolving.

This sign in Bogotá, Colombia states: "This land is not for sale. Unscrupulous people may try to fool you. Get information at: Tel XX."

